

whenever said central database is changed, said message containing information regarding the change.

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18. (Amended Once) A method for handling an access request at a PoP, said access request generated by a user logging on to said PoP, said user having a home PoP, the method including:

accessing a list of network access servers (NASes) known to the PoP and a computer network containing the PoP, said list located locally at the PoP;

validating that said access request was received from a known entity by determining if an entry exists in said list for the NAS from which the access request was received;

determining if said user's home PoP is said PoP;

forwarding said access request to an AAA server located at said PoP if said user's home PoP is said PoP; and

relaying said access request to said user's home PoP if said user's home PoP is not said PoP.

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38. (Amended Once) An apparatus for handling an access request at a PoP, said access request generated by a user logging on to said PoP, said user having a home PoP, the apparatus including:

a memory configured to store a NAS list, said NAS list containing entries on each NAS known to the PoP and a computer network containing the PoP, and located locally at

the PoP;

a NAS list accessor coupled to said NAS list;

an access request validator coupled to said NAS list accessor;

a user home PoP determiner; and

an access request forwarder coupled to said user home PoP determiner, said access request forwarder coupled to an AAA server if the PoP is said user's home PoP and coupled to a computer network if the PoP is no said user's home PoP.

42. (Amended Once) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for handling an access request at a PoP, said access request generated by a user logging on to said PoP, said user having a home PoP, the method including:

accessing a list of network access servers (NASes) known to the PoP and a computer network containing the PoP, said list located locally at the PoP;

validating that said access request was received from a known entity by determining if an entry exists in said list for the NAS from which the access request was received;

determining if said user's home PoP is said PoP;

forwarding said access request to an AAA server located at said PoP if said user's home PoP is said PoP; and

relaying said access request to said user's home PoP if said user's home PoP is not said PoP.

Please add new claims 43-66 as follows:

43. (New) An apparatus for centrally managing a computer network, including:  
means for maintaining a central database of all NASes known to the computer network; and  
means for broadcasting a message to a NAS list located at each POP in the computer network whenever said central database is changed, said message containing information regarding the change.
44. (New) The apparatus of claim 43, wherein all of said NASes known to the computer network are all NASes within the computer network which have been chosen as being valid.
45. (New) The apparatus of claim 43, wherein said means for maintaining is a Network Control Console.
46. (New) The apparatus of claim 45, wherein said Network Control Console is a graphical interface.
47. (New) The apparatus of claim 43, wherein said means for maintaining includes means for adding NASes, deleting NASes, and modifying the entries of NASes in said central database as the need arises.

48. (New) The apparatus of claim 43, wherein said broadcasting is performed automatically by a broker whenever a change to said central database is made.

49. (New) The apparatus of claim 43, wherein said means for broadcasting includes means for publishing a broker event via a broker.

50. (New) An apparatus for locally processing an access request at a Point-of-Presence (PoP) in a computer network having other PoPs, said access request received from a NAS, the apparatus including:

means for accessing a list of network access servers (NASes) known to the PoP and the computer network, said list located locally at the PoP; and

means for validating that said access request was received from a known entity by determining if an entry exists in said list for the NAS from which the access request was received.

51. (New) The apparatus of claim 50, further including means for retrieving a user record from a database of user records located locally at said PoP, said database of user records containing records for only those users who have been identified as having the PoP as their home PoP.

52. (New) The apparatus of claim 50, wherein each entry in said list contains a field identifying a NAS and a field identifying a dictionary of attributes supported by the corresponding NAS.

53. (New) The apparatus of claim 52, wherein said dictionary of attributes is a RADIUS dictionary.

54. (New) The apparatus of claim 50, wherein said each entry in said list contains fields for:

a domain name of a NAS;  
a vendor name of said NAS;  
a shared secret between all known NASes and AAA servers in the network; and  
a dictionary name, said dictionary name indicating a dictionary of attributes supported by said NAS.

55. (New) The apparatus of claim 54, wherein said means for validating further includes means for validating that said access request was received from a known entity by determining if the domain name that the access request was received from matches the domain name field of any entry in said list.

56. (New) The apparatus of claim 55, wherein said means for validating further includes means for examining whether a password supplied with said access request

matches the shared secret field of a corresponding entry in said list if the domain name that the access request was received from matches the domain name field of any entry in said list.

57. (New) The apparatus of claim 54, wherein said dictionary of attributes is a standard RADIUS dictionary.

58. (New) The apparatus of claim 50, wherein said means for accessing and means for validating are an Authentication, Authorization, and Accounting (AAA) server.

59. (New) The apparatus of claim 50, further including means for subscribing to a broker event to update said list whenever a NAS known to the computer network is added, deleted, or modified.

60. (New) An apparatus for handling an access request at a PoP, said access request generated by a user logging on to said PoP, said user having a home PoP, the apparatus including:

means for accessing a list of network access servers (NASes) known to the PoP and a computer network containing the PoP, said list located locally at the PoP;

means for validating that said access request was received from a known entity by determining if an entry exists in said list for the NAS from which the access request was received;

means for determining if said user's home PoP is said PoP;

means for forwarding said access request to an AAA server located at said PoP if said user's home PoP is said PoP; and

means for relaying said access request to said user's home PoP if said user's home PoP is not said PoP.

61. (New) The apparatus of claim 60, wherein said means for determining, means for forwarding, and means for relaying are a Protocol Gateway.

62. (New) The apparatus of claim 60, wherein said means for determining includes means for examining a user name entered by said user.

63. (New) The apparatus of claim 62, wherein said means for determining further includes means for parsing said user name to reveal a PoP location indicated within said user name.

64. (New) The apparatus of claim 63, wherein said PoP location indicated within said user name is a city name as a prefix to said user name.

65. (New) The apparatus of claim 63, wherein said PoP location indicated within said user name is an abbreviation for a city name contained within a domain name affixed to the end of said user name.

66. (New) The apparatus of claim 62, wherein said means for determining further includes means for parsing said user name to reveal a domain name, said domain name indicating an ISP in control of said home PoP.

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